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A low applicative analysis of External Possession in Russian

PHILIP SHUSHURIN
New York University

ABSTRACT

The paper proposes a low applicative analysis of two constructions with external possessors: namely, dative and PP external possessors headed by the preposition *u*. I argue that external possessors are merged by a low applicative head immediately above the DP containing the possessee. External possessors may either remain in situ or move to a subject position if there is no higher argument in the clause. I show that dative external possessors can only be licensed in the presence of an Accusative phrase; PP possessors need not be licensed and have a freer distribution. Furthermore, I argue against movement and high applicative analyses of Russian external possessors.

KEYWORDS keyword 1 · keyword 2 · keyword 3 · keyword 4

1 INTRODUCTION

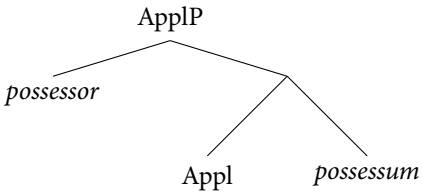
Recent research in argument structure (Landau, 1999; Deal, 2013, 2017) has established that nominals with possessive semantics can be found both DP-internally, as in example (1), or, perhaps less commonly, outside of the DP containing their possessee, as the two sentences in example (2) illustrate:

(1) Dima slomal [**moju** mašinu]
Dima.NOM broke my.ACC car.ACC
'Dima broke my car.'

(2) a. Dima slomal Nine mašinu
Dima.NOM broke Nina.DAT car.ACC
'Dima broke Nina's car.'
b. [U menja] slomalas' mašina
U me.GEN broke.ANTIC car.NOM
'My car broke.'

The status of these external possessors has been controversial and many authors have contended that external possessors in different languages have distinctively divergent properties. In some languages, such as Nez Perce, there is strong evidence that external possessors are generated DP-internally and then moved to an object position (Deal, 2013). In other languages, such as Russian, external possessor constructions co-exist with internal possessor constructions, suggesting that Deal's movement analysis cannot be straightforwardly applied. Pylkkänen (2002) and Markman (2007) propose that in such languages, external possession constructions are derivationally unrelated to constructions with canonical possessors and that external possessors are introduced in a functional projection outside of a noun phrase. In this paper, I argue that the base generation analysis is in fact correct for both dative and PP external possessors in Russian.

(3) The structure of external possession in Russian



Next, I show that two other proposed analyses, namely, raising analysis and high applicative analysis, can't be applied to the studied construction and therefore must be dismissed. The rest of the paper is organized as follows. Section 2 discusses main data and proposes a low applicative analysis of both dative and PP external possessors. In section 3, I provide evidence against movement and high applicative analyses of external possession in Russian. Section 4 compares the distribution of internal and external possessors. Section 5 concludes.

2 PROPOSAL

2.1 APPLICATIVE ANALYSIS OF EXTERNAL POSSESSORS

In Russian, possessors are most commonly realized as genitive or adjectival phrases inside the DP containing their possessee.

(4) **Internal, or 'canonical' possessors**

a. Dima slomal [**moju** mašinu]
Dima.NOM broke my.ACC car.ACC
'Dima broke my car.'

b. [**Moja** mašina] slomalas'
my.NOM car.NOM broke.ANTIC
'My car broke.'

However, in constructions in example (5), the possessor surfaces outside the possessee-DP:

(5) **External possessors**

a. *Dative external possessors*
Dima slomal **mne** mašinu
Dima.NOM broke me.DAT car.ACC
'Dima broke my car.'

b. *U-possessors*
U menja slomalas' mašina
U me.GEN broke.ANTIC car.NOM
'My favorite car broke.'

In example (4-a), the possessor is realized as dative phrase, while in example (4-b), the possessor is realized as a prepositional phrase. Although PP external possessors are most commonly found at the left periphery of the clause, this is not always so: in the next example, the possessor PP surfaces postverbally, at the same linear position as the dative external possessor in example (5-a).

(6) Oxrannik proveril u Niny dokumenty
guard.NOM checked U Nina.GEN documents.ACC
'The guard checked Nina's documents.'

Similarly, while dative possessors are most commonly found postverbally, immediately preceding the possessee, they can surface at the left periphery as well.

(7) Mne včera razbilo vetrom vazu
me.DAT yesterday broke.3P.N wind.INS vase.ACC

'My vase was broken by the wind yesterday.'

Despite the difference in case marking, the bolded phrases in both (5-a) and (5-b) have properties of possessors: such constructions are compatible with relational adjectives like *ljubimyi* 'favorite' (see Harves 2013 for discussion):

(8) a. Dima slomal mne ljubimuju mašinu
Dima.NOM broke me.DAT favorite.ACC car.ACC
'Dima broke my favorite car.'
b. U menja slomalas' ljubimaja mašina
U me.GEN broke.ANTIC favorite.NOM car.NOM
'My favorite car broke.'

As Harves reports, based on observations made in Baker (2015), this adjective is only licensed in the presence of a possessor, cf. **(moja) ljubimaja kniga* 'my/*a favorite book'. This diagnostic can be used to distinguished external possessor constructions from other similarly looking constructions (such as transfer-of-possession datives etc.) Importantly, the use of the adjective favorite is impossible under the same construal in the absence of the possessor, as the examples below show.

(9) a. Dima poslal mne *(moju) ljubimuju knigu
Dima.NOM sent me.DAT my.ACC favorite.ACC book.ACC
int. 'Dima sent me my favorite book.'
b. U Dimy doma živet *(ego) ljubimaja sobaka
U Dima.GEN at.home lives (his) favorite dog.NOM
int. 'His favorite dog lives at Dima's place.'

Yet, external possessors are clearly contained outside of the possessee DP, in constrast to internal possessors. One piece of evidence for that comes from pied-piping. In the following wh-question, the internal possessor, a wh-word, triggers pied-piping of the rest of the DP, containing the possessee. Leaving the possessee in situ is dispreferred.

(10) a. [**Čjo** pal'to]$_i$ sobaka porvala t$_i$?
whose overcoat.ACC dog.NOM tore
'Whose overcoat did the dog tear?'
b. ??**Čjo**$_i$ sobaka porvala [t$_i$ pal'to]?
whose dog tore overcoat
int. 'Whose overcoat did the dog tear?'

Dative possessors, in contrast, can't trigger pied-piping:

(11) a. **Komu** sobaka prinesla pal'to?
who.DAT dog.NOM brought overcoat.ACC
'Who did the dog bring the overcoat to?'
b. ?**Komu** pal'to sobaka prinesla?
who.DAT overcoat.ACC dog.NOM brought
int. 'Who did the dog bring the overcoat to?'

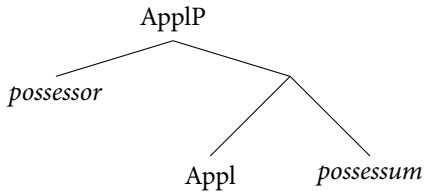
This data strongly suggests that internal possessors surface inside the DP that contains possessee while dative/PP possessors surface outside of it.

(12) a. Internal possessors: [... possessor ... possessee ...]$_{DP}$
b. Dative/PP possessors: ... possessor ... [... possessee ...]$_{DP}$

One important question that this data raises is how exactly dative and prepositional phrases in example (2) get interpreted as possessors. I suggest that both dative and PP possessors are introduced by an applicative head which is merged directly above the Possessee-DP. I follow Pylkkänen (2002, 2008); Cuervo (2003) in assuming that the applicative head encodes a possession relation.

(13) Semantics of Appl:
$[\![\text{Appl}]\!] = \lambda x.\lambda y.xRy$ (where R is a contextually determined relation)

(14)

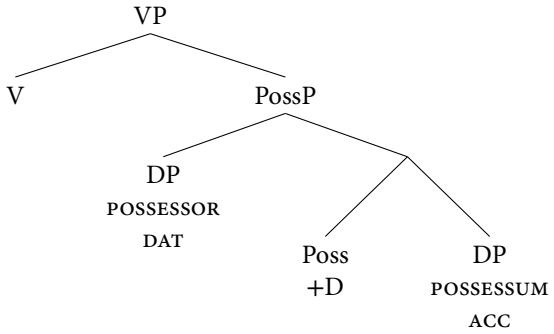


I propose that this head comes in two featural modification: Appl_{+D} and Appl_{-D}. The +D feature requires that the head merge a DP in its specifier while −D feature constrains the specifier from being a DP: the specifier in this case must be a PP.

(15) Two kinds of Appl:
a. Appl_{+D}: must merge a DP in its specifier
b. Appl_{-D}: must merge a non-DP in its specifier

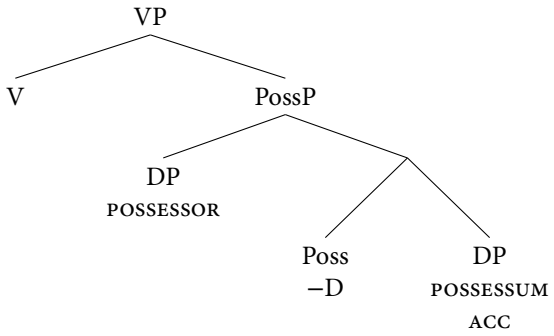
In assuming this, I am following the tradition of research which suggests that argument- introducing heads impose selectional requirements on their specifiers (Oseki, 2017; Oseki & Kastner, 2017). In the case Appl_{+D} is merged, a dative possessor is merged, as in the following example:

(16) **Dative external possessors**
a. Dima slomal **mne** mašinu
Dima.NOM broke me.DAT car.ACC
'Dima broke my car.'
b. The structure of dative external possessors in Russian:



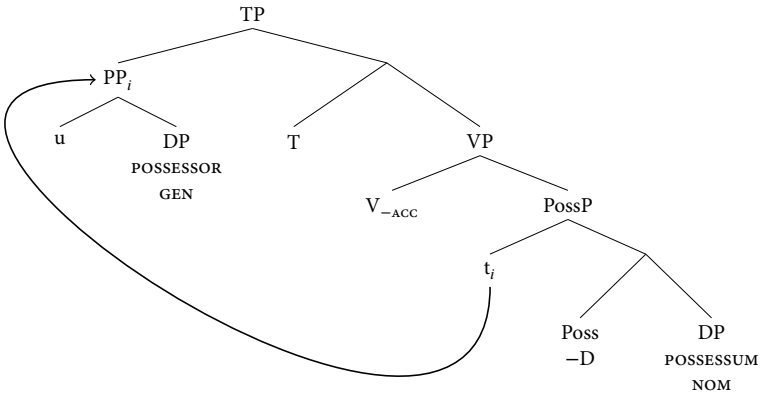
Otherwise, a Appl_{-D} is merged, in which case a prepositional phrase of the form [u + DP] is merged in the SpecPossP.

(17) **U-possessors**
a. Oxrannik proveril u menja **dokumenty**
guard.NOM checked U me.GEN documents.ACC
'The guard checked my documents.'
b. The structure of u-possessors in Russian:



Finally, in those cases where the external possessor is found at the left periphery, I suggest that the possessor moves to the subject position.

(18)



I assume that the preposition *u*, which is used in PP external possession is semantically vacuous, and in terms of their semantic denotation, dative possessors and u-possessors are identical. Outside of external possession constructions, the preposition *u* has a vague locative semantics (similar to English prepositions *by, at*) which is absent in the external possession construction. Finally, the question arises what conditions the choice of one or the other type of head. Although I largely leave this question for future research, one observation can be made at this point. All the attested examples with dative external possessors involve predicates with causative semantics (*slomat'* 'break', *ispačkat'* 'make dirty', *porvat'* 'tear', *počinit'* 'fix' etc.). Interestingly, PP external possessors are compatible with both non-causative and causative predicates. For instance, passives of sentences with dative external possessors license PP possessors:

(19) a. Sobaka porvala mne kurtku
dog.NOM tore me.DAT jacket.ACC
'The dog tore my jacket.'
b. U menja porvana kurtka
U me.GEN torn jacket.NOM
'My jacket is torn.'

One construction which bears a remarkable similarity to sentences with PP possessors are predicative possession structures, which also involve u-phrases interpreted as possessors, as as the one below:

(20) U Dimy est' mašina
U Dima.GEN there.is car.NOM
'Dima has a car.'

As argued at length in Myler (2016), in such sentences the prepositional phrase are generated higher than low applicative, in the external argument position. One posssible analysis of such construction might invlolve the generation of a possessor in the verbal specifier with subsequent movement to SpecTP. I leave the elaboration of the analysis of u-possessors for future research.

2.2 EXTERNAL POSSESSORS AND CASE LICENSING

Despite semantic similarity, the two types of possessors differ in their distribution. One important difference is that dative possessors are only found in the presence of an accusative phrase. Once no such phrase is present the use of dative possessors is ungrammatical, as the following examples show:

(21) a. **Locative possessee**
*Mašina stoit mne v garaže
car.NOM stands me.DAT in garage.LOC
int. 'The car is in my garage.'//

b. **Instrumental possessee**
*Načal'nik nedovolen **mne** rabotoj
boss.NOM unhappy me.DAT work.INS
int. 'The boss is unhappy with my work.'

If a transitive clause containing a dative possessor gets passivized, the use of dative possessors is not possible, as the following examples show:

(22) a. Sobaka porvala Dime kurtku
dog.NOM tore Dima.DAT overcoat.ACC
'The dog tore Dima's jacket.'

b. *Kurtka byla mne porvana
jacket.NOM was me.DAT torn
int. 'My jacket was torn.'

The following generalization can be formulated:

(23) **Dative-accusative generalization**
Dative external possessors are only found in the presence of an Accusative phrase

In contrast, u-possessors have a much wider distribution. The following sentences show that apart from Accusative and Nominative, the possessee in such constructions can be marked with oblique cases or be embedded under a preposition.

(24) a. U menja načalnik nedovolen rabotoj
U me.GEN boss.NOM unsatisfied work.INS
'My boss is unhappy with the work.'

b. Ja xoču ubrat'sja u sebja v komnate
I want to.clean U self in room.LOC
'I want to clean [in] my room.'

I suggest that the distribution of both dative and PP external possessors is governed by principles of case licensing. More specifically, I suggest that Dative possessors, similarly to other instances of Structural Dative, are only licensed in the presence of an Accusative phrase (or, using Baker's 2015 terminology, are dependent on Accusative).

(25) **The Rule of Dative Licensing**
A nominal can get Dative marking only if there is a c-commanded Accusative nominal in the same domain.

Importantly, if a DP external possessor cannot get dative case, it cannot get any other case

either. This position results in ungrammaticality. In contrast, PP-external possessors do not need a c-commanded Accusative phrase because the genitive DP that they contain is always licensed by the preposition *u*. This results in that PP external possessors can appear in various positions in the clause, irrespective of the marking of the possessee.

2.3 EXTERNAL POSSESSORS AND THE SUBJECT POSITION

In this subsection, I want to provide additional evidence for movement of external possessors to the subject position. Let's start with considering the following paradigm.

(26) **Linear position of dative external possessors**

a. *Postverbal*

Dima [slomal mne mašinu]
Dima.NOM broke me.DAT car.ACC
'Dima broke my car.'

b. *Left periphery*

Mne včcera razbilo vetrom ljubimuju vazu
me.DAT yesterday broke wind.INS favorite.ACC vase.ACC
'My (favorite) vase was broken by the wind yesterday.'

(27) **Linear position of PP external possessors**

a. *Postverbal*

Oxrannik proveril u menja dokumenty
guard checked U me.GEN documents.ACC
'The guard checked my documents.'

b. *Left periphery*

U menja slomalas' mašina
U me.GEN broke.ANTIC car.NOM
'My car broke.'

The pattern above suggests that movement of an external possessor is only available if there is no argument higher in the clause. Both example (26-a) and example (27-a) contain external arguments (*Dima* and *oxrannik*, respectively), which presumably move to the subject position. In contrast, both the example (26-b), an impersonal sentence, and the sentence in (27-b), an anticausative structure, do not contain an overt external argument (I remain agnostic on whether these clauses contain a null external argument). This results in that the external possessor (i.e. the phrase in SpecApplP) is the highest argument in the verbal domain.

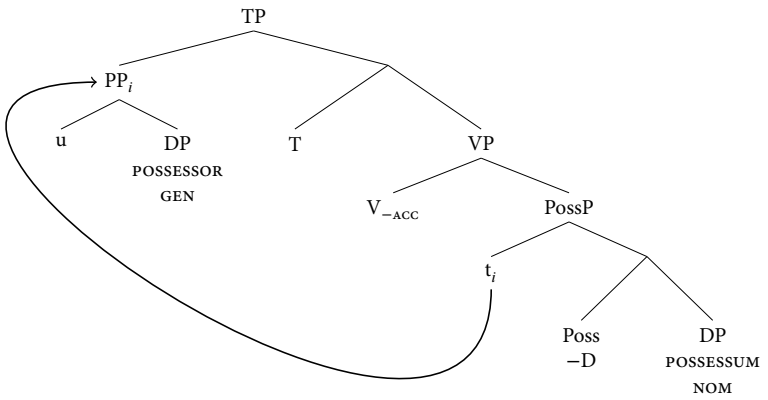
I suggest that in this case the external possessor moves argument to SpecTP.[1] For instance, I suggest that in example (28) the T attracts the argument, i.e. the u-phrase. When the u-phrase is found in the left periphery, the nominative subject is found in a post-verbal position; moving of a nominative phrase to a preverbal position is only possible under special information structure conditions (such as topicalization of the PP in (29)).

(28) **U-possessors**

a. U menja slomalas' mašina
U me.GEN broke.ANTIC car.NOM
'My car broke.'

b.

[1] Bailyn (2004); Livitz (2006), a.o., suggest the subject position in Russian can be occupied by nominative as well as prepositional phrases



(29) U menja mašina slomalas'
u me.GEN car.NOM broke.ANTIC
'My car broke.'

Similarly, if a phrase with an external possessor contains a nominative phrase higher in the structure, the *u*-phrase must remain in situ: moving it to the left periphery is strongly dispreferred under unmarked information structure conditions.

(30) a. Oxrannik proveril u Niny dokumenty
guard.NOM checked u Nina.GEN documents.ACC
'The guard checked Nina's documents.'
b. ?U Niny oxrannik proveril dokumenty
u Nina.GEN guard.NOM checked documents.ACC
'The guard checked Nina's documents.'

The following generalization can be formulated.

(31) **Subject-Possessor generalization**
An external possessor can only move to the subject position if it is the highest argument in its clause.

A similar pattern is observed with sentences containing no nominative argument, such as ones below.

(32) a. Vazu razbilo vetrom
vase.ACC broke wind.INS
'The vase was broken by the wind.'
b. ?Razbilo vazu vetrom
broke vase.ACC wind.INS
int. 'The vase was broken by the wind.'

In example (32-a), the highest (and the only) argument is the accusative phrase which must move to the subject position; leaving such argument in situ is dispreferred (33-b). If a dative possessor is added (33-a), it is now the highest argument and must move to the subject position.

(33) a. Mne vazu razbilo vetrom
me.DAT vase.ACC broke wind.INS
'The vase was broken by the wind.'
b. ?Vazu razbilo mne vetrom
vase.ACC broke me.DAT wind.INS
'The vase was broken by the wind.'

3 AGAINST RAISING AND HIGH APPLICATIVE ANALYSES

In this section, I argue explicitly against two prominent analyses of external possession in Russian found in the recent literature, namely, raising and high applicative analyses. Thus, Grascenkov & Markman (2008) and Harves (2013) suggest that external possessors are generated DP-internally and then move to a DP-external position. There are several problems with suggesting that the external possessors are generated in the same position as canonical possessors. One problematic fact about this analysis is that possessee phrases can contain structures which disallow possessive modification. For example, the possessee can be a full pronoun or an adverbial:

(34) a. [U menja zdes'] ne rabotaet svet
u me.GEN here NEG works light.NOM
'The light is down [here] in my kitchen.'
b. Dima mne ee slomal
Dima.NOM me.DAT her broke
'Dima broke it [i.e.my car].'

The following sentences show that neither full pronouns nor adverbials are compatible with internal possessors.

(35) a. *moja ona
my she.NOM
int. 'my it/she'
b. *mojo zdes'
my here
int. 'my here(abouts)'

Another persistent idea in analyzing external possession is that external possessors are merged by a high applicative head (Psexotskaya, 2011). This idea is problematic for the following reasons. First, as Bosse et al. (2012) observe, high (i.e. preverbal) non-selected arguments differ from external possessors in several important respects. One of such differences is the licensing of non-coreferential DP-internal possessors. In the following German example, for instance, a high applicative argument (Chris), is compatible with a non-referential canonical possessor (Bens). In contrast, in Russian external possession constructions, internal possessors are banned:

(36) a. **German**
Alex zerbrach Chris Bens Vase
Alex.NOM broke Chris.DAT Ben's vase
'Alex broke Ben's vase on Chris.'
b. **Russian**
*Dima porval Nine moju knigu
Dima.NOM tore Nina.DAT my.ACC book.ACC
int. 'Dima tore my book on Nina.'

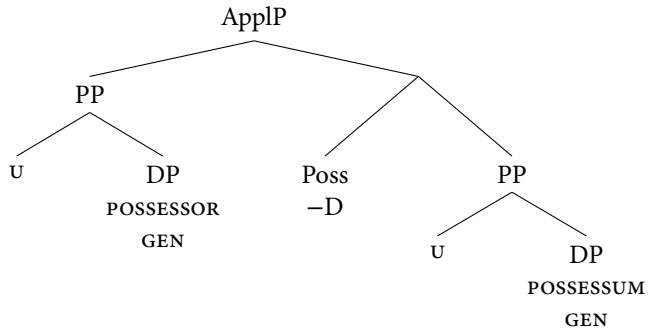
The relevant, and unavailable reading where my book is controlled/possessed by Nina. Another problematic aspect of high applicative analysis are the constructions with multiple *u*-possessors, such as the one below:

(37) [U menja u babuški] slomalas' mašina
u me.GEN u grandmother.GEN broke.ANTIC car.NOM
'My grandmother's car broke.'

In this sentence, there are two possession relations: the one with the between the grandmother and the car and the relation between me and the grandmother. Importantly, the second relation is local, with both the possessee and the possessor forming a constituent. Since high applicative are defined as arguments merged higher than the verb, and there is no verb in the bolded constituent, there is no

obvious way of applying a High Applicative Analysis to external possession phenomenon in Russian. In my analysis, the two highest arguments are related by a local possessive head which is merged directly above the possessee. Importantly, this head can be merged completely independently of the verbal head:

(38) An applicative head relating two prepositional phrases:



Such head can be merged iteratively, with the number of stacked u-possessors constrained only by pragmatic factors (see Harves (2013) for some discussion):

(39) [U menja u babuški ... u sestry] slomalas' mašina
U me.GEN U grandmother.GEN ... U sister.GEN broke.ANTIC car.NOM
'My grandmother's ... sister's car broke.'

4 APPLICATIVES AND POSSESSORS

Finally, let's consider the canonical possessors, i.e. those which are found DP-internally, such as the one in the following sentence.

(40) Dima slomal [**moju** mašinu]
Dima.NOM broke my.ACC car.ACC
'Dima broke my car.'

The exact structural status of both adjectival and genitive possessors has been subject of debate in Russian linguistics. As Lyutikova (2017) points out, the postulation of a Poss head inside Russian DPs is motivated by semantic reasons: non-referential nouns can't be the source of possessive semantics hence the possessive semantics must be encoded elsewhere in the structure. Therefore I suggest that Russian possessors (at least of non-relational nouns) are introduced by a DP-internal functional head: Poss. Importantly, such Poss head must be lower in the structure than a D head, since demonstratives usually linearly precede possessors:[2]

(41) Dimina (*eta) kurtka
Dima's this jacket
'Dima's jacket'

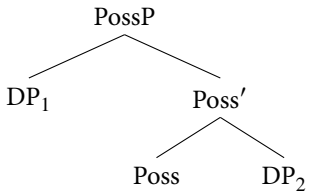
Given the semantic similarity (or near-identity) of Poss and Appl, one may suggest that Poss and Appl are instances of the same head. To formulate differently, Appl can be seen as a positional variant of Poss found DP-externally. If this view is correct, the presence of a D head is the factor which distinguishes external possessors from canonical ones. Thus, the possessive constructions in the following two sentences are only different in whether a D head is merged above Poss/Appl or not:

[2]Here and henceforth, D is understood as a highest functional head in the nominal domain. I take a largely agnostic view on the NP/DP debate in this paper. Thus, the term DP is to be understood is 'the highest nominal projection'. See however Lyutikova (2017) for a thorough discussion of the problem.

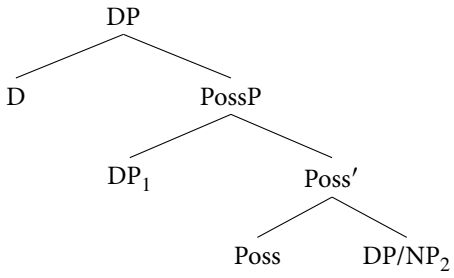
(42) a. Dima slomal [**moju** mašinu]
Dima.NOM broke my.ACC car.ACC
'Dima broke my car.'
b. Dima slomal **mne** mašinu
Dima.NOM broke me.DAT car.ACC
'Dima broke my car.'

(43) Two positions for Possessors:

a. DP-external possessors (Low Appl):



b. DP-internal possessors:



I suggest that this difference has important consequences for case marking and ultimately results in different distribution of external and internal possessors. One important aspect in which external possessors are different from canonical possessors is that they are much more constrained in their distribution. While DP-internal possessors are usually can freely combine with their possessees, external possessors require either a c-commanded Accusative (in which case they can be realized as dative possessors) or a preposition, which can assign them Genitive Case. I want to propose that this is due to the fact that the Poss head is not a case assigner and that possessors need to be additionally case-licensed. When possessor is merged DP-internally, it can be assigned Genitive, which, as Pesetsky (2013) notes, is available to almost any nominal merged in the nominal domain. Alternatively, it can be realized as a concording modifier, as in example (42-a), which presumably does not need case licensing.

When merged DP-externally, nominal Genitive is unavailable, and the possessor must be licensed in a different way. One possibility is Structural Dative. The other possibility is merging a semantically vacuous case-assigner.

One important consequence of this view is that the Poss/Appl has no other selectional requirements other than to merge with two nominals or PPs. Of course, different languages may impose different requirements on the exact phrasal status of both the possessor and the possessee. For instance, certain languages might disallow PP possessors etc.

5 CONCLUSION

In this paper, I proposed a low applicative analysis of two constructions with external possessors in Russian. I argued against high applicative and raising analysis and showed that dative, but not prepositional possessors must be additionally case-licensed. I want to conclude with several remaining questions. First, what conditions the choice between dative and prepositional external possessors and why do dative possessors require causative predicates? Second, what is the distribution of the Poss head inside of the DP? Last, can the given analysis be extended to predicative possession constructions? I leave these questions for future research.

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The authors may want to add t[illegible]e at this phase of production.

7 CONTACT

Philip Shushurin

To be provided by the authors.

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